

REMARKS/DISCUSSION OF ISSUES

By this Amendment, Applicant amends claims 2-15 and adds new claims 16-19. Accordingly, claims 1-19 are pending in the application.

Applicant thanks the Examiner for acknowledging the claim for priority and receipt of certified copies of all the priority documents, and for the indication that the drawings are acceptable.

Claims 2-9 are amended for non-statutory reasons, to use more standard grammatical language in the preambles. The claims are not narrowed in scope and no new matter is added.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

CLAIM OBJECTIONS

The Office Action objects to claims 2-15 due to the grammar employed in the preamble of each claim.

By this Amendment, Applicant amends all of the preambles to employ more standard grammatical language.

Accordingly, Applicant respectfully requests that the objections to claims 2-15 be withdrawn.

35 U.S.C. § 112

The Office Action rejects claims 10-15 under 35 U.S.C. § 112 because the claim recites certain elements which have already been recited in claim 1, which claim 10 also explicitly referenced.

By this Amendment, Applicant amends claim 10 to be in standard independent form without explicitly referring back to claim 1. Applicant believes that there is no longer any duplicative recitation of elements in claim 10 as amended.

Accordingly, Applicant respectfully requests that the rejections of claims 10-15 under 35 U.S.C. § 112 be withdrawn.

35 U.S.C. § 103

The Office Action rejects: claims 1-6 and 10-15 under 35 U.S.C. § 103 over Lofstrom U.S. Patent 6,161,213 ("Lofstrom"); and claims 7-9 under 35 U.S.C. § 103 over Lofstrom in view of Bohr et al. U.S. Patent 6,337,507 ("Bohr").

Applicant respectfully submits that all of the claims 1-15 are patentable over the cited art for at least the following reasons.

Claim 1

Among other things, in the integrated circuit of claim 1, the first random parametric variations for a first subset of identification cells are greater than the second random parametric variations for a second subset of cells for generating an identification code by measuring the parameter values of the identification cells.

The Office Action fairly admits that Lofstrom does not disclose this feature.

However, the Office Action states that it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Lofstrom to make the first random parametric variations for the first subset of identification cells are greater than the second random parametric variations for the second subset of cells, citing the text at col. 7, lines 10-12.

Applicant respectfully disagrees.

At most, the text at col. 7, lines 10-12 states that an increase in random parametric variations increases the robustness of identification in Lofstrom's device. However, the cited text fails to contemplate or suggest that what is needed is not an absolute increase in the parametric variations in Lofstrom's device *per se*, but rather what is needed is an increase in the DIFFERENCE between the random parametric variations for the identification cells as compared against the random parametric variations for the cells used for generating the identification code by measuring the parameter values of the identification cells.

Lofstrom does not recognize, or suggest, that different types of cells should have different magnitudes of random parametric variations, and particularly, that the identification cells should have greater random parametric variations than the other

cells that are used for generating the identification code by measuring the parameter values of the identification cells.

Indeed, in contrast to having identification cells with random parametric variations that are greater than the random parametric variations of cells that are used for generating the identification code by measuring the parameter values of the identification cells, Lofstrom suggests that the devices in all of these cells should have similar characteristics. See, e.g. col. 7, lines 3032; col. 8, lines 31-35 Lofstrom then addresses offset voltages by only measuring step changes in the identification cell outputs (col. 7, lines 40-53).

In short, nothing in Lofstrom provides any suggestion that the first random parametric variations for the identification cells should be made greater than the second random parametric variations for the cells used for generating an identification code by measuring the parameter values of the identification cells.

Accordingly, for at least these reasons, Applicant respectfully submits that claim 1 is patentable over Lofstrom.

Claims 2-6

Claims 2-6 depend from claim 1 and are deemed patentable for at least the reasons set forth above with respect to claim 1, and for the following additional reasons.

Claim 2

Among other things, in the integrated circuit of claim 2, the first random parametric variations cause random differences among the parameter values of the identification cells, the random differences each having an absolute value, the absolute values having an average value; and the second random parametric variations cause an offset in the parameter values of the identification cells, the offset having an absolute value, **the average value being larger than the absolute value of the offset.**

The Office Action fails to cite anything in Lofstrom disclosing or suggesting that **the average value is larger than the absolute value of the offset.**

Accordingly, for at least this additional reason, Applicant respectfully submits

that claim 2 is patentable over Lofstrom.

Claim 10

At the outset, Applicant respectfully notes that claim 10 is a method (or process) claim. Claim 10 is not drawn to any product. Claim 10 is not a "product by process" claim. Instead, claim 10 is drawn to a specific method of making an integrated circuit. Likewise, claim 10 does not include any "product by process" *limitations*. All of the features of the claimed process must be accorded full patentable weight.

Among other things, the method of claim 10 includes increasing the first random parametric variations in the first subset of cells with respect to the second random parametric variations in the second subset of cells to make the first random parametric variations larger than the second random parametric variations. This feature must be given full patentable weight

Applicant respectfully submits that the cited art does not disclose or suggest any method that includes such a feature.

Accordingly, for at least this reason, Applicant respectfully submits that claim 10 is patentable over the cited art.

Claims 11-15

Claims 11-15 are all drawn to methods, not to products. They are not and cannot be "product-by-process" claims, nor do they include any "product by process" *limitations*.

Claims 11-15 depend from claim 10 and are deemed patentable for at least the reasons set forth above with respect to claim 10, and for the following additional reasons.

Claims 7-9

Claims 7-9 all depend from claim 1. Bohr does not remedy the shortcomings of Lofstrom with respect to claim 1. Therefore, claims 7-9 are deemed patentable over Lofstrom and Bohr for at least the reasons set forth above with respect to claim 1.

Furthermore, with respect to claim 7, Applicant respectfully submits that the

cited text at col. 3, lines 58-67 of Bohr merely discloses that the contacts 101 may be designed to have any one of a variety of shapes. It does not disclose or suggest that any random parametric variations are produced from a random distribution of shapes in a silicide material. With respect to claim 9, Applicant respectfully submits that an impurity in a polysilicon resistor does not insulate a first part of the resistor from a second part of the resistor.

NEW CLAIMS 16-19

New claims 16-19 all depend from claim 1 and are all deemed patentable for at least the reasons set forth above with respect to claim 1, and for the various novel features recited therein.

CONCLUSION

In view of the foregoing explanations, Applicant respectfully requests that the Examiner reconsider and reexamine the present application, allow claims 1-19 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

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